

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/871,816
Attorney Docket No.: Q64768

REMARKS

With this Amendment, Applicant amends claims 1 and 7. No new matter is added.

I. Preliminary Matters

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Applicant thanks the Examiner for acknowledging receipt of the Information Disclosure Statement filed June 4, 2001, and for considering the references cited therein.

However, the Examiner did not indicate whether the Formal Drawings filed on June 4, 2001, are accepted. Applicant respectfully requests that the Examiner acknowledge and approve the aforementioned Formal Drawings.

II. Rejection under 35 U.S.C. § 102 over Maeshima

Claims 1 and 4-8 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Maeshima et al. (U.S. Patent No. 6,092,113; hereinafter “Maeshima”). Of these rejected claims, only 1 and 7 are independent. Claim 1, as herein amended, requires:

wherein the step of receiving connection requests, the step of verifying the possibility of setting up the connections, and the step of updating said database are performed by a scheduler program which spans a services management layer and a network management layer.

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Applicant respectfully submits that Maeshima does not meet this requirement. Maeshima “relates to a system for constructing a VPN (Virtual Private Network) on the INTERNET”¹ to assure “reservation of a bandwidth by [a host or a] sub-network.” (Col. 2, lines 9-11). According to the disclosure of Maeshima, routers 300A, 300B and 300C² on an Internet Protocol (IP) tunnel 101³ support a Reservation Resource Protocol (RSVP), which assures bandwidth on the IP tunnel 101. (Abstract; Col. 3, lines 11-23; Col. 3, lines 43-47). “[W]hen a host [201] or sub-network on a LAN needs bandwidth,” “the host or sub-network … [requests assurance] of a bandwidth to a router at [the start point]⁴” (e.g. 300A) of the IP tunnel [101] which has “a section [102]⁵ where a bandwidth is assured by RSVP.” (Col. 5, lines 28-33). The router at the start point (e.g. 300A) “transfers … information” corresponding to the reservation request, via a packet (i.e., IP datagram 311), “to other routers” (e.g. routers 300 as shown in Figs. 9(a) & 9(b)

¹ See Col. 1, lines 5-8 of Maeshima.

² See Col. 3, lines 14-23 and Col. 4, lines 30-43 of Maeshima explaining that routers 300A, 300B, 300C correspond to LAN 200A, LAN 200B and LAN 200C respectively; *See also* Fig. 1 of Maeshima.

³ See Col. 3, lines 1-10 of Maeshima pointing out that an “IP tunnel is a section where a packet exists” where the “packet is constructed by adding … to an original packet, an IP header which has an IP address of the router 300A and an IP address of the router 300B (*a start point and an end point* of the IP tunnel 101).” (emphasis added).

⁴ See Col. 3, lines 18-20 and Figs. 9(a) and 9(b) of Maeshima describing that router 300A “is at the start point of the IP tunnel [101].”

⁵ See Col. 4, lines 53-54 of Maeshima pointing out that section 102 shown in Figs. 9(a) and 9(b) “[assures] bandwidth by RSVP.”

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of Maeshima) “on a path and [to] a router at” the end point of the IP tunnel 101 (e.g. router 300B as shown in Figs. 9(a) & 9(b) of Maeshima) “by RSVP.”⁶ (Col. 5, lines 36-38).

In order to transfer a packet (i.e., IP datagram 311) from a router at the start point of an IP tunnel 101 (e.g. 300A) to a router at the end point of the IP tunnel 101, (e.g. 300B) Maeshima teaches that the router at the start point (e.g. 300A) outputs the packet to an adjacent router (e.g. 300) via an output interface of an output processor 306 which is disposed within the router at the start point (e.g. 300A). The adjacent router (e.g. 300) receives the packet via an input interface of a processor 307 which is disposed within the adjacent router (e.g. 300).⁷ Subsequently, the adjacent router (e.g. 300) outputs the packet to another adjacent router (e.g. 300) which receives the packet via an input interface.⁸ This process is repeated until a router in the end point of the IP tunnel 101 (e.g. 300B) receives the packet.⁹ (See Figs. 9(a) and 9(b) of Maeshima).

⁶ See Col. 4, lines 44-49 of Maeshima discussing that “a router at one end of the IP tunnel (for example, the router 300A) *requests* the setting of the IP tunnel to a router at another end of the IP tunnel (for example, the router 300B).” (emphasis added); See also Figs. 9(a) and 9(b) of Maeshima.

⁷ See Col. 3, lines 64-66 of Maeshima explaining that “packets … are processed by an input processor [305] and an output processor [306] *inside of … routers 300A, 300, 300B.*; (emphasis added); See also Col. 4, lines 66-67; Col. 5, lines 1-8 & Fig. 2 of Maeshima; See also Col. 3, lines 15-18 of Maeshima describing that each router “comprises an input processor 305, an output processor 306 for each output interface, a processor 307 for identifying a reservation.”

⁸ See Col. 3, lines 45-51 of Maeshima noting that “packets [arrive] at each input interface” of the processor 307 which is disposed within the routers.

⁹ See Col 3, lines 9-10 of Maeshima describing that the “router in the end point [of the IP tunnel 101] for example the router 300B, removes the IP header” within the packet.

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Maeshima merely discloses that routers (e.g. 300A, 300, and 300B) on an IP tunnel 101 transmit and receive packets which correspond to the “[contents] of a reservation [request];”¹⁰ (Col. 5, lines 47-48) Maeshima does not teach “wherein the step of receiving connection requests, the step of verifying the possibility of setting up a connection and the step of updating said database are performed by a scheduler program which spans a services management layer and a network management layer” as claimed in now-amended claim 1.

Because Maeshima does not meet the above-identified requirement of independent claim 1, Maeshima cannot be said to anticipate the claim within the meaning of 35 U.S.C. § 102. Maeshima does not contain any teaching or suggestion of such a feature, either, and therefore Applicant respectfully submits that Maeshima could not be said to render the subject matter of claim 1 obvious within the meaning of 35 U.S.C. § 103.

Applicant therefore respectfully requests the Examiner to withdraw this rejection of claim 1 and its dependent claims 2-6.

Moreover, since independent claim 7 contains features that are similar to the features recited in independent claim 1, Applicant respectfully requests the Examiner to withdraw the rejection of claim 7 and its dependent claim 8 for similar reasons.

¹⁰ Even if it were assumed in this case that the information contained in the packet also corresponds to a designated date and time for reserving bandwidth on the IP tunnel 101, since the packet is transmitted and received between the router at the start point of the IP tunnel 101 (e.g. 300A) and the router at the end point of the IP tunnel 101, (e.g. 300B) Maeshima simply does not teach that the step of receiving connection requests is performed by a scheduler program which spans a services management layer and a network management layer as claimed. As such, the Examiner’s reference to Col. 6, lines 48-53 & Fig. 5 of Maeshima does not teach each of the limitations of independent claim 1.

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III. Rejection under 35 U.S.C. § 103 over Maeshima in view of Abe

The Examiner rejected claims 2 and 3 under 35 U.S.C. § 103 as being unpatentable over Maeshima in view of Abe et al. (U.S. Patent No. 6,115,382: hereinafter “Abe”). Applicant respectfully traverses this rejection.

It has already been pointed out above that Maeshima lacks the above-identified requirement of independent claim 1. Abe does not compensate for this deficiency of Maeshima. Abe is applied in the rejection only for its teaching relating to types of time intervals. Applicant respectfully finds in Abe no teaching or suggestion that would have enabled the artisan of ordinary skill to have modified Maeshima and Abe to include:

wherein the step of receiving connection requests, the step of verifying the possibility of setting up the connections, and the step of updating said database are performed by a scheduler program which spans a services management layer and a network management layer.

Even taken for what they would have meant as a whole to an artisan of ordinary skill, the combined teachings of Maeshima and Abe would not have led such a person to the subject matter of independent claim 1, much less to its dependent claims 2 and 3.

An artisan of ordinary skill would not have (and could not have) combined the applied references in the manner suggested by the Examiner to produce the subject matter of independent claim 1 and therefore Applicant respectfully requests the Examiner to withdraw the § 103 rejection of dependent claims 2 and 3.

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IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Kelly G. Hyndman
Registration No. 39,234

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
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